2019 Terms of Reference

Transboundary Resources Assessment Committee (TRAC)Assessment of Eastern Georges Bank Cod, Eastern Georges Bank Haddock, and Georges Bank Yellowtail Flounder

July 9-11, 2019 St. Andrews, NB Canada

Meeting Chair: Dr. John Neilson

TRAC Co-chairs: Kirsten Clark (Canada) and Tara Trinko-Lake (United States of America)

Objectives

The Transboundary Resources Assessment Committee (TRAC) annually obtains requests for harvest advice on transboundary resources from the Transboundary Management Guidance Committee (TMGC). For the following resources: Eastern Georges Bank Cod, Eastern Georges Bank Haddock, and Georges Bank Yellowtail Flounder:

Cod:

- Update the following biological and fishery indicators of the state of cod in the eastern GB management area with 2018-2019 data: condition factor, swept area survey biomass indices, fishery and survey catch at length, relative F, total mortality (Z), and catch.
- Identify and comment on changes in survey and fishery indicators (relative to the 2018 TRAC).
- Investigate alternative methodologies of providing catch advice, and report on the most promising approaches. Describe plans for further investigation of the identified approach, which will be reviewed at the 2020 TRAC and will then provide catch advice until a benchmark assessment can be completed for this resource.

Haddock:

- Apply the benchmark assessment for haddock to report on the status of the stock, updating results for the latest information from fisheries, including discard estimates and research surveys, and characterize the uncertainty of estimates.
- Describe any adjustments to the benchmark assessment model applied during the TRAC including impacts on advice given to TMGC.
- Evaluate and quantify, if possible, scientific uncertainty of the assessment output (stock status determination and catch projection), discussing current practices of characterization and alternative methods of evaluation.
- Provide analyses to account for retrospective bias on stock biomass and fishing mortality estimates for haddock, if appropriate.

- For a range of total catch values in 2020 and 2021, estimate the risk that the respective fishing mortality rate would exceed F_{ref} = 0.26 for haddock. Include a table showing the 2020 and 2021 catches corresponding to low (25%), neutral (50%), and high (75%) probability that the F would exceed F_{ref} = 0.26 for haddock.
- For a range of total catch values in 2020 and 2021, estimate the risk that the biomass at the beginning of 2021 and 2022 would not achieve a 0%, 10% or 20% increase compared to the beginning of 2020 and 2021 for haddock.
- In view of model diagnostics and model uncertainty, comment on whether two-year advice is appropriate.

Yellowtail Flounder:

- Apply the benchmark assessment (i.e., empirical approach) for yellowtail flounder, update
 results for the latest information from fisheries, including discard estimates and research
 surveys, and characterize the uncertainty of estimates.
- Provide catch advice for 2020 based on the empirical approach for a range of exploitation rates for 2020.
- Describe any adjustments to the benchmark assessment model applied during the TRAC, including impacts on the advice given to TMGC.
- Consistent with 2018 TSR, update and comment on trends in relative F, and total mortality (Z).
- Describe the rationale for the range of exploitation rates provided by TRAC as catch advice compared to previous guidance.

Allocation Shares:

• Review the biomass distribution relative to the U.S./Canada boundary, update results with the 2018 survey information, and apply the allocation shares formula.

Other:

- Report on any changes to the surveys that might impact the assessments such as changes to vessels, timing, area coverage, etc. Describe any potential impacts of these changes.
- Provide an update, if any are available, on targeted research that would help identify mechanisms contributing to changes in stock productivity
- Report on progress of the Atlantic Cod Stock Structure Working Group
- Draft terms of reference for the 2020 TRAC assessment of Eastern Georges Bank Atlantic Cod, Eastern Georges Bank Haddock, and Georges Bank Yellowtail Flounder.
- Provide an update on research related to haddock growth.

Expected Publications

- TRAC Transboundary Status Reports for the Eastern Georges Bank Haddock and Georges Bank Yellowtail Flounder management units.
- TRAC Reference Documents for Allocation Shares, Eastern Georges Bank Haddock management unit, Eastern Georges Bank Atlantic Cod and Georges Bank Yellowtail Flounder management units.
- TRAC Proceedings of meeting discussion.

Participation

- DFO Maritimes scientists and managers
- NMFS Northeast Region scientists and managers
- Canadian and U.S. fishing industry
- U.S. State and Canadian Provincial (NB and NS) representatives
- NEFMC representatives
- Scientific and Statistical Committee (SSC) representatives
- Public and stakeholders/rightsholders